

VILLAGE OF SAUGATUCK

FINAL REPORT, FISCAL YEAR 1982 COASTAL MANAGEMENT PROJECT
SUBGRANT LRP-431

PHASE II PRESERVATION AND REHABILITATION
MT. BALDHEAD/OVAL BEACH RECREATION AREA
(ENGINEERING, DESIGN AND CONSTRUCTION)

Products

- A. Village's Report
- B. Landscape Architect's Report
- C. Engineer's Report
- D. Plans
- E. Specifications

COASTAL ZONE
INFORMATION CENTER

This document was prepared in part through financial assistance provided by the Coastal Zone Management Act of 1972, administered by the Office of Coastal Zone Management, National Oceanic & Atmospheric Administration.

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Michigan Coastal Zone Management Program
GV182 .V55 FY1982 1982

COMMUNITY OFFICE SAUGATUCK — DOUGLAS

Working and Planning Together for a Better Community

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October 25, 1982

Mr. Gordon Anderson
Coastal Program Unit
Division of Land Resource Programs
Department of Natural Resources
Stevens T. Mason Building
P.O. Box 30028
Lansing, Michigan 48909

Dear Mr. Anderson:

The following information summarizes all aspects involved in the planning and execution of the Mt. Baldhead/Oval beach Coastal Management Project as required by the terms of the Grant Agreement between the Village of Saugatuck and the Michigan Department of Natural Resources.

In May of 1982 the Landscape Architecture firm of O'Boyle, Cowell, Rohrer and Associates were employed by the Village of Saugatuck to continue work on a project that had been started in Fiscal Year 1981. At that time, with the use of grant funds made possible by the Department of Natural Resources, the Village began developing Mt. Baldhead Park into a more useable and better defined recreation site. As additional funds became available in 1982 the scope of the project enlarged to include the Oval Beach as part of a newly proposed "Recreation Area". The project goals also shifted to include the erosion problem on the beach shoreline and atop Mt. Baldhead.

Further study in this area revealed that the erosion on Mt. Baldhead was caused mainly by "people erosion". The constant failure of visitors to remain on the poorly defined paths had caused destruction of large patches of vegetation coupled with unnatural shifting of sand, leaving large barren "holes" scooped out of the side of the dune.

This was also a cause for some erosion at the Oval Beach, however this had been seriously compounded by the wind and wave action on the shoreline.

After several on- and off-site meetings with the landscape architect, a specific plan emerged as to the most efficient and economically feasible way to approach these goals.

This plan was submitted to the Village of Saugatuck and was subsequently approved by representatives of the Village and the Michigan Department of Natural Resources.

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The final plan for Mt. Baldhead included the use of signs, plantings and clearly defined trails to control future foot traffic and repair past damage.

Initially, the only economically feasible approach to the shoreline problem appeared to be the use of concrete rip rap as an erosion control device, and a partial wooden walkway to control the flow of pedestrian traffic. Due to the amount of funds available, however, the opportunity to develop any long term or permanent control of the problem seemed unlikely. For this reason, an application for additional funds was submitted and approved, enabling Saugatuck to go ahead with a more extensive plan for the shoreline erosion control.

The actual work on Mt. Baldhead began in July, 1982 and included the clearing and redefining of trails already in existence, and creating a new trail to connect two already established trails. This action ended a situation where people were encouraged to trespass on private property. The solution was accomplished by blocking the previous trails temporarily with large piles of brush and planting appropriate plantings in front of the brush as a more long term, permanent discouragement. This method was also used to block several "spurs" off the main trails which were a product of uncontrolled foot traffic leaving the trails and running down the slopes at inappropriate areas.

Two of the trails have overlook areas that provide excellent panoramic views of Lake Michigan, the dunes and the Old Light House. These areas were cleared to make the overlooks more pronounced, and split log benches were built to provide a natural resting spot for hikers. Logs were also used to make steps set into the steep slopes in order to facilitate climbing, and to encourage visitors to stay on the trails.

The final work done on Mt. Baldhead was to increase the awareness of visitors to our area in general, and Mt. Baldhead specifically. In completing the original intention of our first grant, two large carved wooden signs were placed on top of Mt. Baldhead in frames built last year when the new observation deck was completed. These signs enable people to orient themselves to their surroundings and supply information covering the historical past of this area.

In order to guide visitors to other areas of the dune, another carved wooden sign was placed by the observation deck. This will help in leading people to the beginning of each trail where they will find smaller painted signs describing each individual trail by length, description and degree of difficulty. Finally, people will be urged to remain on the trails by the use of trail markers and small signs asking for cooperation in "maintaining the sensitive nature of the dunes."

In August, 1982 construction at the Oval Beach began on a wooden walkway system with handrails designed to provide a continuous, protective path from the south end of the beach to the north end. Two new stairways were also built leading down to the beach area. These will encourage more use at the south end of the Oval and minimize previous congestion at the north beach. The handrail will discourage the public from running down the bluff which overlooks the beach. This will prevent any further damage to the sensitive vegetation on the slope and encourage new growth.

Mr. Gordon Anderson
October 25, 1982

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Perhaps the most important work undertaken at the Oval Beach was the concrete rip rap placed at the toe of the bluff. This method of erosion control was the maximum protection available within our budget as recommended by Gove Associates engineering firm. The Village had originally contracted for 280 square yards of rip rap to be installed at only the worst erosion points. With the additional funds gained through our grant request, the Village was able to place rip rap the entire length of the south beach area between the two new stairways, an additional 79.8 square yards.

The overall goals undertaken by the Village of Saugatuck while pursuing this project have been fully realized. Although a complete reversal after years of damage, both natural and man-made, cannot be achieved instantly, steps have now been taken to arrest present damage and minimize most future damage.

In addition, visitors to our area will now be able to enjoy the entire recreation area to its' fullest extent through more accessible knowledge and information.

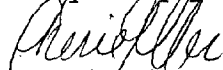
The community will use their own employees to maintain this facility in the future as outlined by the design consultant.

Attached is a complete financial recounting of all expenses incurred during this project.

If further information is needed, I will be pleased to provide it.

Thank you.

Very truly yours,



Cherie Giller
Village of Saugatuck

CG/elc
encls.

1982 MT. BALDHEAD/OVAL BEACH
FEDERAL COASTAL ZONE MANAGEMENT PROJECT

FINAL COMPLETION COSTS

Village Funds	\$ 9,184.06	
Federal Funds	<u>36,256.00</u>	\$45,440.06

DETAIL OF DISBURSEMENTS

Salaries, Wages and Fringe Benefits

Reimbursement to Village for use		
of Village Employees	\$ 1,059.74	
Outside Labor	<u>1,529.50</u>	\$ 2,589.24

Materials Purchases

Plant Materials	\$ 3,921.40	
Soil and Peat Moss	405.30	
Guard Rail	532.00	
Mt. Baldhead Orientation Signs	750.00	
Carved Trail Sign	300.00	
Painted Trail Signs	295.00	
Posts, Bolts, Concrete, etc.	83.06	
Commercial Record (Invitation to Bid)	61.18	
Film Purchase and Development	14.80	
Plexiglass Sign Protection	<u>160.00</u>	\$ 6,522.74

Consultant, Landscape Architect

	\$ 2,170.00	
	2,110.00	
	<u>1,591.25</u>	\$ 5,871.25

Construction Contract

Outside Contractor

(Material Hauling and Earth Work) \$ 280.00

Squire Troutman Builders, Inc.

August 13, 1982 14,000.00

September 10, 1982 12,000.00

September 16, 1982 1,500.00

September 27, 1982 (Final) 2,676.83

\$30,456.83

Total Disbursements:

\$45,440.06

Federal Funds

Received April 3, 1982 \$ 1,972.00

Received September 7, 1982 16,156.00

\$18,128.00

Grant Allocation \$36,256.00

Received to Date 18,128.00

Final Request:

\$18,128.00

1982 Mt. Baldhead/Oval Beach
Federal Coastal Zone Management Project

Documents Included in Final Report

Written Report
(5 Copies)

Financial Statement
(5 Copies)

Invoices and Bills
(2 Copies)

Reports and Specifications:

<u>Report 1.</u> (2 Copies)	Lake Michigan Oval Beach and Mt. Baldhead Dunes Preservation and Rehabilitation	June, 1982
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<u>Sign Specification</u> (2 Copies)		July, 1982
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<u>Trail Specification</u> (2 Copies)		July, 1982
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<u>Planting Specifications</u> (2 Copies)		July, 1982
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<u>Site Improvements</u> (2 Copies)		July, 1982
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Blueprints:

Sheet 1.	Mt. Baldhead Dunes Trail Development	June 15, 1982
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Sheet 2.	Beachfront Existing Conditions	June 15, 1982
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Sheet 3.	Beachfront Development Master Plan	June 15, 1982
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Sheet 4.	Beachfront Development Planting Plan	June 15, 1982
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Sheet 1.	Beachfront Development Phase I.	June 30, 1982
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Sheet 2.	Beachfront Existing Conditions	June 15 and 30, 1982
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Sheet 3.	Steps #2, Layout and Detail	July 30, 1982
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Trail Sign Design

Before and After Photographs and Slides
(1 Original, 4 photocopies)



Before

Future Site of
Elevated Stairway

(Photo taken
toward Parking Lot)

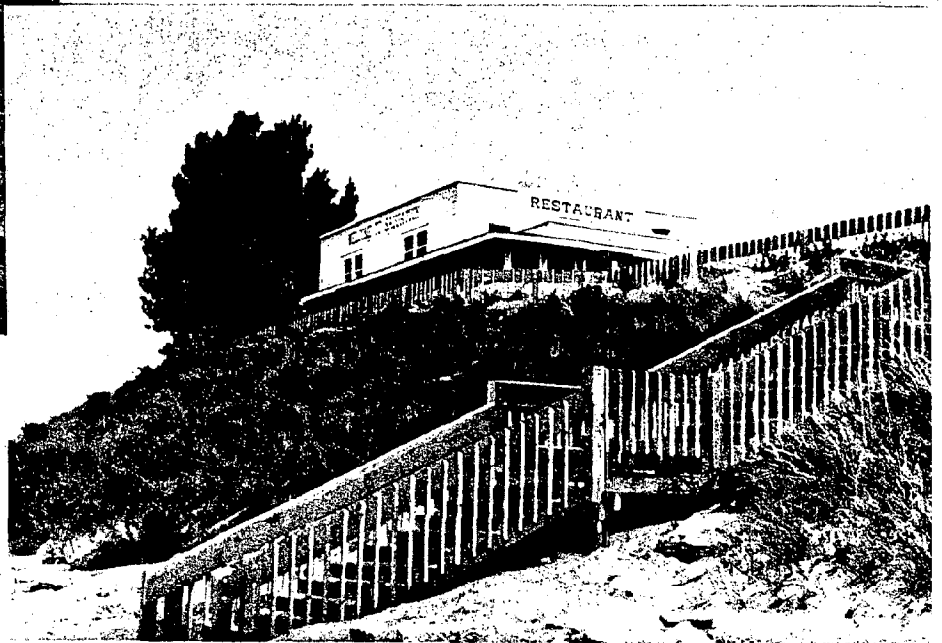
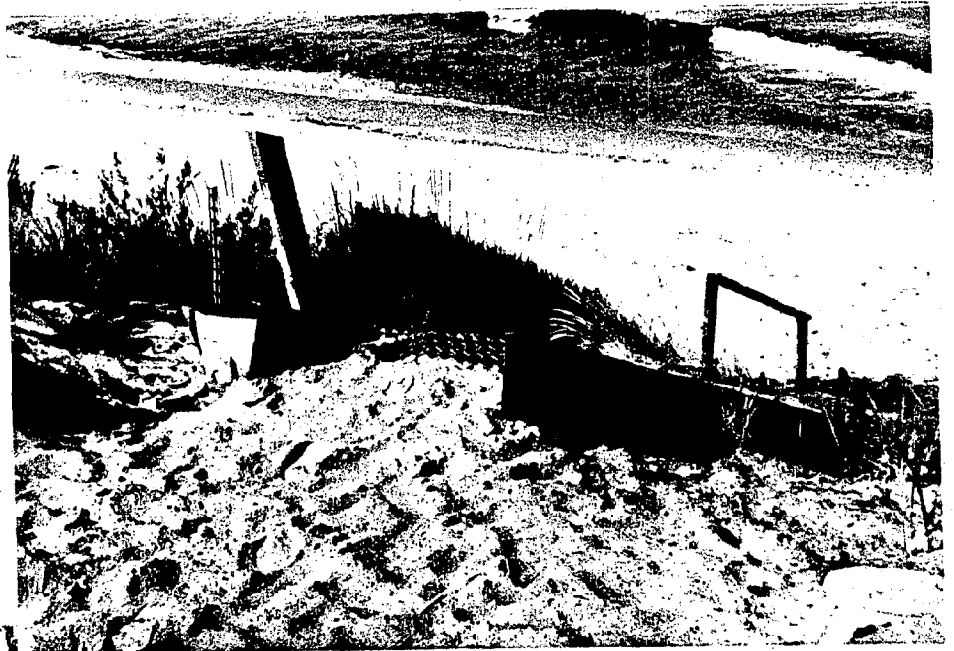


After

Elevated Stairway
(Photo taken from Parking Lot)

Before

Old damaged metal
stairway →

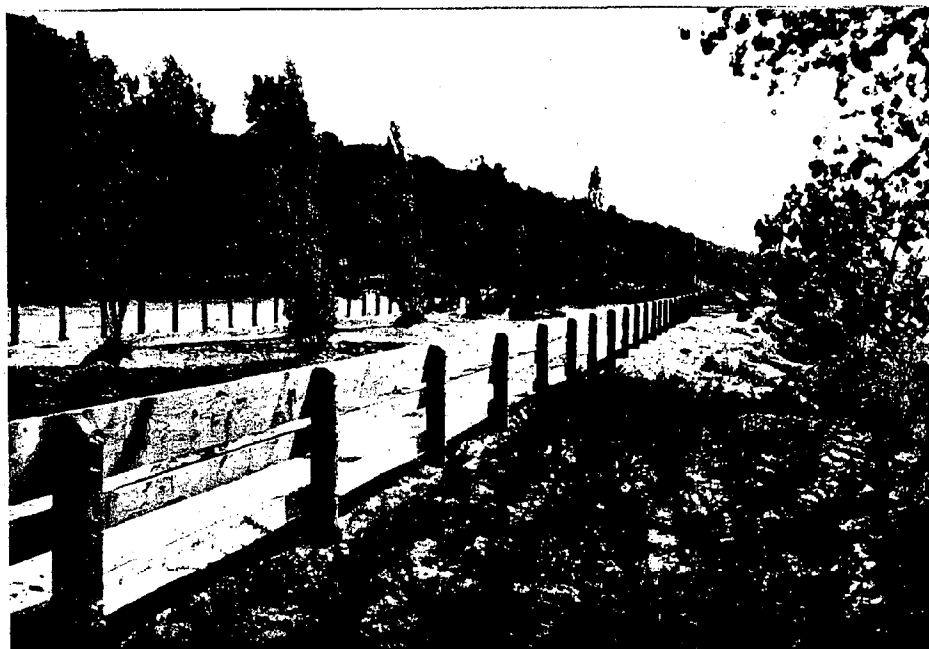


After

New wooden stairway

After

Cleared & straightened
"Old Road" with
handrail & plantings.

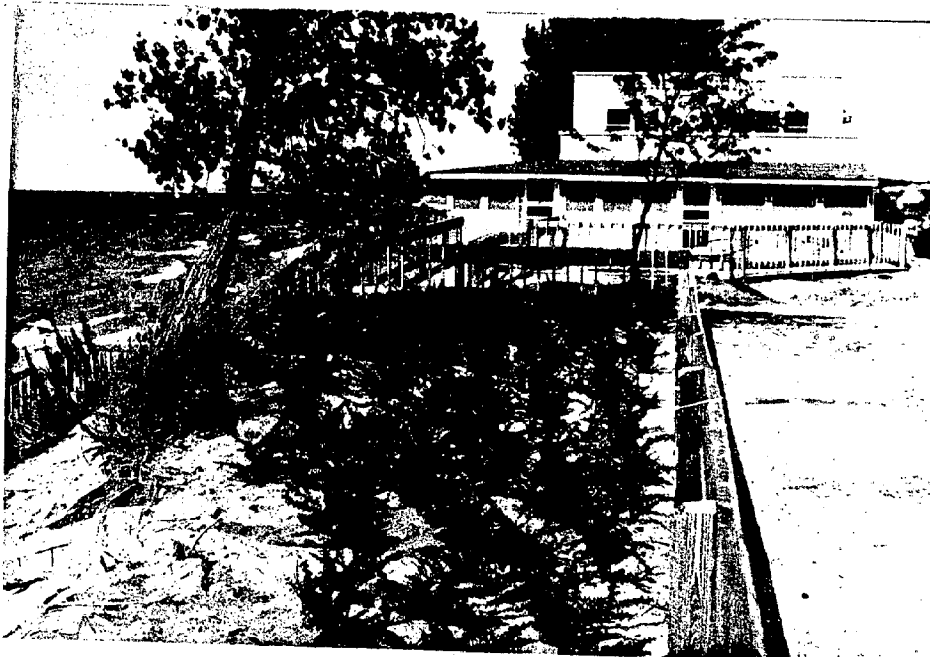


Before

"Old Road", cracked, damaged, and
badly eroded underneath.

After

Plantings and
wood walkway
running around
beach house.



Before

Back of Beach house.

Before

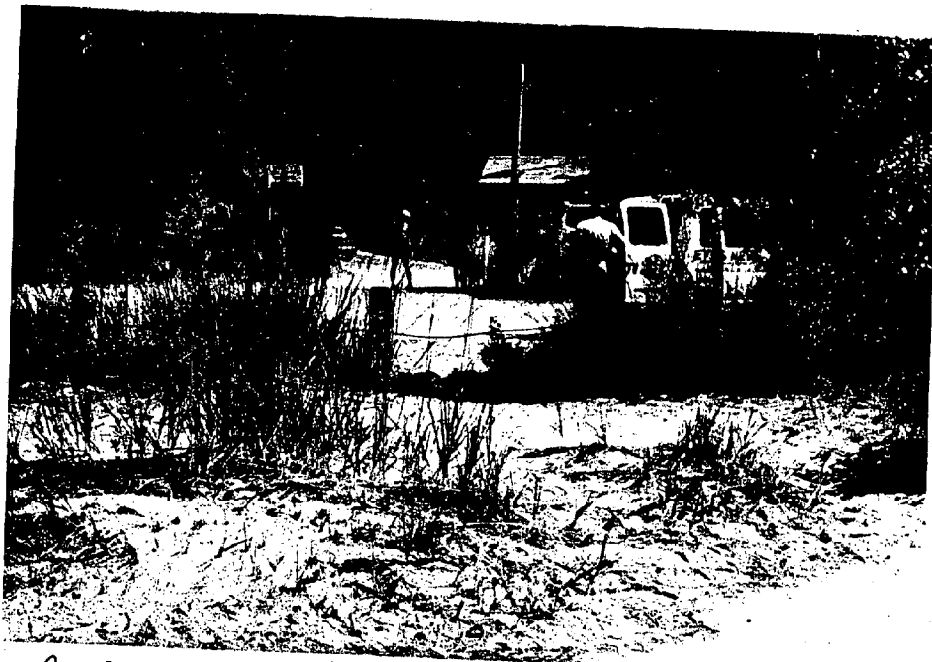
- Old concrete behind
beachhouse.



After

- Wood walkway
~~runway~~ running
from North
- Parking lot,
Behind Beach
house, to South
Beach area and
stairs.





Before

Overgrown area at South beach by Entrance gate.



After

Wood walkway with handrail at South beach by entrance gate. Leads to South Stairs and into Dead Creek way.

After
"Old road" -
straightened and
repaved with
patches, and
and rail.



Before
"Old Road" - overgrown, cracked, uneven, and
dangerous.

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